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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,372	01/12/2005	Kyoichi Sasaki	WATAB1.001APC	2253
20995	7590	06/08/2006	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			RAHLL, JERRY T	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/521,372

Applicant(s)

SASAKI ET AL.

Examiner

Jerry T. Rahl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,435,728 to Shimoji et al.
4. Regarding Claim 1, Shimoji et al. describes an optical fiber connection component (10) having a connection member (6) with through holes, extending from one side to another in a sliding direction for slidably guiding optical fibers (12), guides (17) for slidably guiding rod-like coupling members (16), and a tuned square U-shaped plug (3) having a through-hole or inserting optical fibers (12) and a guide holes at the bottom of the concavity of the U-shape (see rear of 3 in Figures 2 and 4C), and wherein the connection member is arranged slidably in the plug by

being installed in the concavity of the U-shape via the rod-like coupling member inserted into both the plug and connection member (see Figures 1A-4C and Columns 8-11).

5. Shimoji et al. does not specifically describe the guides extending from one edge to another. However, where the instant specification and evidence of record fail to attribute any significant criticality to a particular arrangement the particular arrangement is deemed to have been a design consideration within the skill of the art. In re Kuhle, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to create the device of Shimoji et al. with the guides extending from one edge to the other of the connection member. The motivation to do so would have been to remove the need to determine the depth of the guide holes during the manufacturing process.
6. Regarding Claim 2, Shimoji et al. describes the guide as a through hole (see Figures 2 and 4C).
7. Regarding Claim 3, Shimoji et al. describes the rod-like coupling member as cylindrical (see Figures 1A-4C).
8. Regarding Claim 4, Shimoji et al. describes two connection members arranged in the plug (see Figures 1A, 1C and 3).
9. Claims 6-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoji et al. and further in view of US Patent No. 5,581,645 to Gehri.
10. Regarding Claims 6 and 9, Shimoji et al. describes an optical fiber connection component (10) having a connection member (6) with through holes for optical fibers (12), guides (17) for rod-like coupling members (16), and a tuned square U-shaped plug (3) having a through-hole or inserting optical fibers (12) and a guide holes at the bottom of the concavity of the U-shape (see

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rear of 3 in Figures 2 and 4C), and wherein the connection member is arranged slidably in the plug by being installed in the concavity of the U-shape via the rod-like coupling member (see Figures 1A-4C and Columns 8-11). Further, Shimoji et al. describes bringing the through-holes of the connection members face-to-face (see Figures 1A-4C) and sliding the optical fibers in a direction of the center axis of the fibers along the rodlike coupling members (see Figures 1A-1C). Shimoji et al. does not specifically describe the optical fibers connected in the through hole of one connection member.

11. Gehri describes an optical fiber connection component (10) having a connection member (17) with through holes for optical fibers, and a plug (9b) having a through-hole (18b) or inserting optical fibers, and wherein the connection member is arranged slidably in the plug by being installed in the concavity plug (see Figures 3-4 and Columns 3-4). Further, Gehri et al. describes bringing the through-holes of the connection members face-to-face (see Figures 3-4) and sliding the optical fibers in a direction of the center axis of the fibers so that the optical fibers connected in the through hole of one connection member (see Figure 4).

12. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the fiber biasing and positioning setup of Gehri with the connector device of Shimoji et al. The motivation for doing so would have been to reduce exposure of the fiber ends to the environment when not connected (see Gehri at Column 1 Lines 60-67). Therefore, it would have been obvious to combine Gehri with Shimoji et al. to obtain the invention as specified.

13. Regarding Claim 7, Shimoji et al. and Gehri do not specifically describe the use of adhesive to connect the connection members. However it is well-known to use adhesive on connectors. The motivation for using adhesive with the connector of Shimoji et al. and Gehri

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would have been to securely fasten the connection for long-term use and to keep external contaminants from interfering with the optical connection. Therefore, it would have been obvious to one of ordinary skill in the art to use adhesive with the connector assembly describes by Shimoji et al. and Gehri.

14. Regarding Claim 10, Shimoji et al. and Gehri do not specifically describe the use of a refractive index matching agent for connecting the fibers. However it is well-known to use such refractive index matching agents with connectors. The motivation for using adhesive with the connector of Shimoji et al. and Gehri would have been to reduce optical losses at the interface between the fibers. Therefore, it would have been obvious to one of ordinary skill in the art to use refractive index matching agent with the connector assembly describes by Shimoji et al. and Gehri.

15. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoji et al. and Gehri as applied to claims 6 and 9 above, and further in view of US Patent No. 5,838,856 to Lee.

16. Shimoji et al. and Gehri describe a connection assembly, as discussed above. Shimoji et al. and Gehri do not specifically describe the fiber connection components fixed to an adapter.

17. Lee describes an optical fiber connection assembly having connection units (110, 120) connected face-to-face with an adapter (130) (see Figures 3-6 and Columns 2-3).

18. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the adapter of Lee with the connection assembly of Shimoji et al. and Gehri. The motivation for doing so would have been to ensure the optical connection (see Lee at Column 3 Lines 30-40).

***Response to Arguments***

19. Applicant's arguments filed March 16, 2006 and March 17, 2006 have been fully considered but they are not persuasive.

20. Regarding Applicant's argument that Shimoji et al. does not describe the through holes for slidably guiding an optical fiber through the connection member, the Examiner notes that the connection member slides (using spring 5, see Figures 1A-1C). Therefore, the through holes guide the fibers through the connection member as it slides.

21. Regarding Applicant's argument that the through holes for the optical fibers do not extend from one side edge to another, the Examiner notes that the holes must extend in such a manner to allow for optical connection with the optical module (11).

22. Regarding Applicant's argument that the guides for the connecting members do not extend from one side edge to another, the Examiner directs the Applicant to the above discussion of the guide holes (see paragraph 5 of this Office Action).

23. Regarding Applicant's argument that the coupling member is both inserted into the plug, the Examiner notes that as the connection is made, the coupling members are moved into the mouth of the U-shaped plug to be inserted to the connection member (see Figures 1A-1C).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

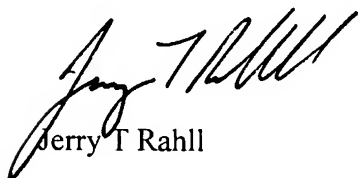
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jerry T. Rahll



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